

Title (en)
Circular dichroism detector for HPLC

Title (de)
Detektor zum Nachweis von zirkularem Dichroismus für HPLC

Title (fr)
DéTECTEUR du dichroïsme circulaire pour HPLC

Publication
EP 0916945 A1 19990519 (EN)

Application
EP 98120742 A 19981102

Priority
• JP 32965897 A 19971114
• JP 20582198 A 19980707

Abstract (en)
A circular dichroism detector includes a light source (10) having a large emission intensity in the ultraviolet region such as an HgXe lamp or Hg lamp, a diffraction grating (G) for wavelength dispersing the light emitted from the light source, a polarizer (12) for linearly polarizing the light emitted from the light source, a PEM (13) for modulating wavelength dispersed linearly polarized light to alternately produce left-handed circularly polarized light and right-handed circularly polarized light, a flow cell (15) through which the circularly polarized light will be passed, and a photodiode (19) for detecting the circularly polarized light passing through the flow cell. <IMAGE>

IPC 1-7
G01N 30/74; **G01N 21/19**

IPC 8 full level
G01N 21/19 (2006.01); **G01N 30/74** (2006.01); **G01N 30/88** (2006.01)

CPC (source: EP US)
G01N 21/19 (2013.01 - EP US); **G01N 30/74** (2013.01 - EP US); **G01N 2021/0382** (2013.01 - EP US); **G01N 2030/746** (2013.01 - EP US)

Citation (search report)
• [X] EP 0410610 A2 19910130 - PHILIP MORRIS [US]
• [A] US 4498774 A 19850212 - YEUNG EDWARD E [US], et al
• [A] WO 8803266 A1 19880505 - GOODALL DAVID MURRAY [GB], et al
• [A] MANNSCHRECK A: "ON-LINE MEASUREMENT OF CIRCULAR DICHROISM SPECTRA DURING ENANTIOSELECTIVE LIQUID CHROMATOGRAPHY", TRAC, TRENDS IN ANALYTICAL CHEMISTRY, vol. 12, no. 5, 1 May 1993 (1993-05-01), pages 220 - 225, XP000376937
• [Y] PURDIE N ET AL: "CIRCULAR DICHROISM - 1. THEORY AND PRACTICE", TRAC, TRENDS IN ANALYTICAL CHEMISTRY, vol. 9, no. 3, 1 March 1990 (1990-03-01), pages 94 - 97, XP000101611
• [Y] PURDIE N ET AL: "CIRCULAR DICHROISM II. ANALYTICAL APPLICATIONS", TRAC, TRENDS IN ANALYTICAL CHEMISTRY, vol. 9, no. 4, 1 April 1990 (1990-04-01), pages 136 - 142, XP000113545

Cited by
EP1376099A1; EP1544600A4; US7002692B2; US7480049B2

Designated contracting state (EPC)
CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0916945 A1 19990519; JP 4026939 B2 20071226; JP H11201959 A 19990730; US 6118536 A 20000912

DOCDB simple family (application)
EP 98120742 A 19981102; JP 20582198 A 19980707; US 18892898 A 19981109